

# KENWOOD

STEREO CASSETTE RECEIVER

## KRX-793

## KRX-593

### INSTRUCTION MANUAL

KENWOOD CORPORATION

B60-1186-00 © (K, P, M, X) [A]

 Caution: Read this page carefully to ensure safe operation.

#### Before applying power

For the U.S.A. and Canada

**Important!**

Units shipped to the U.S.A. and Canada are designed for operation on 120 V.

For Australia and Europe

**Important!**

Units shipped to Australia are designed for operation on 240 V.

## Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.

We appreciate your patronage and take pride in the long tradition of quality components that our company represents.

So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features and system-connection considerations so that your listening pleasure will be enhanced right from the start.

You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability we have sought to anticipate your needs and desires.

**Keep this manual handy for future reference.**

### For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

### Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.


### For the U.S.A.

#### Note to CATV system installer;

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point cable entry as practical.

### WARNING NOTICE:

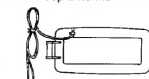
**IN MOST CASES IT IS AN INFRINGEMENT OF COPYRIGHT TO MAKE COPIES OF TAPES OR DISCS WITHOUT THE PERMISSION OF THE COPYRIGHT OWNERS. ANYONE WISHING TO COPY COMMERCIALLY AVAILABLE TAPES OR DISCS SHOULD CONTACT THE MECHANICAL COPYRIGHT PROTECTION SOCIETY LIMITED OR THE PERFORMING RIGHTS SOCIETY LIMITED.**

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

When your unit needs to be repaired, bring the entire set (Speakers excluded) to your dealer.

### Accessories

- AM loop antenna ..... 1
- FM indoor antenna ..... 1



- Loop antenna stand ..... 1
- Remote control unit ..... 1







- Batteries (R6/AA) ..... 2
- AC plug adaptor ..... 1  
(Except for some areas)



For the unit with a European AC plug in areas other than Europe.

## Contents

Caution: Read the pages marked  carefully to ensure safe operation.

Introduction .....	2	Listening to sound .....	13
 Before applying power .....	3	Audio adjustment .....	14
 Safety precautions .....	3	Operation of tuner .....	15
 IMPORTANT SAFEGUARDS .....	4	Playback of cassette deck .....	17
Before operation .....	6	DPSS operation .....	19
Antenna connections .....	7	Recording on cassette deck (Deck B only) .....	21
System connections .....	8	Tape dubbing .....	25
Controls and indicators .....	9	Timer operations .....	26
Operation of remote control unit .....	11	In case of difficulty .....	30
Clock adjustment .....	12	 Specifications .....	32

**⚠ Caution: Read this page carefully to ensure safe operation.**  
**Before applying power**

**For the U.S.A. and Canada**

**Important!**

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only.

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THE AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

**For the United Kingdom**

**Important!**

Units shipped to the U.K. are designed for operation on 240 volts AC only.

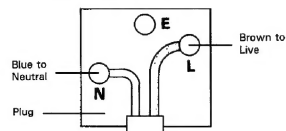
The mains plug must be removed from the wall socket prior to any internal examination.

The wires in this mains lead are coloured in accordance with the following code:

Blue ..... Neutral  
Brown ..... Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

Wire colour	Plug terminal marking
Blue	N or Black
Brown	L or Red



- Notes:**
1. If a 13-amp plug is used, this must be fitted with a 13-amp fuse.
  2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

**For Australia and Europe**

**Important!**

Units shipped to Australia are designed for operation on 240 V AC only.

Units shipped to Europe are designed for operation on 230 V AC only.

**For other countries**

**Important!**

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

**AC voltage selection**

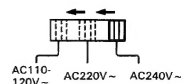
This unit operates on 110-120 or 220-240 volts AC. The AC voltage selector switch Type A or Type B on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

**Note:**

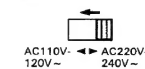
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

**AC voltage selector switch**

**Type A**







**Type B**



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

**Safety precautions**

**WARNING:** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

 <b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN		CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
		THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
		THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

## IMPORTANT SAFEGUARDS

**⚠ Caution : Read this page carefully to ensure safe operation.**

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

**1. Power sources** — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**2. Power-cord protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Never pull or stretch the cord.



**3. Grounding or polarization** — The precautions should be taken so that the grounding or polarization means of this unit is not defeated.

**4. Ventilation** — The unit should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.

Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.

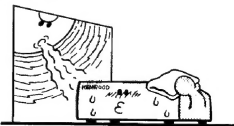


**5. Water and moisture** — The unit should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.



**6. Temperature** — The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above + 5°C (41°F).

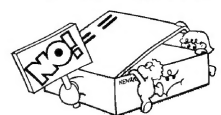
**7. Heat** — The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



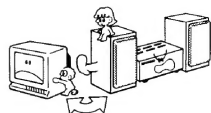
**8. Electric shock** — Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



**9. Enclosure removal** — Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



**10. Magnetic fields** — Keep the unit away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.



**11. Cleaning** — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.



**⚠ Caution : Read this page carefully to ensure safe operation.**

- 12. Carts and stands** — An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



- 13. Nonuse periods** — The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

- 14. Abnormal smell** — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service center.

#### POWER OFF!



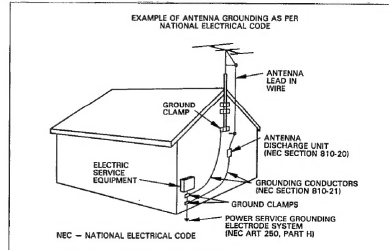
- 15. Damage requiring service** — The unit should be serviced by qualified service personnel when:

- A. The power-supply cord or the plug has been damaged; or
- B. Objects have fallen, or liquid has been spilled into the unit; or
- C. The unit has been exposed to rain; or
- D. The unit does not appear to operate normally or exhibits a marked change in performance; or
- E. The unit has been dropped, or the enclosure damaged.

- 16. Servicing** — The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

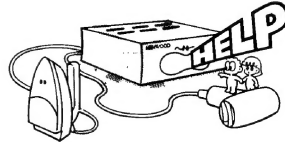
- 17. Outdoor antenna grounding** — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding con-

ductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.



- 18. Power lines** — An outdoor antenna should be located away from power lines.

- 19. AC outlets** — Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.



#### Notes:

- 1. Item 3 is not required except for grounded or polarized equipment.
- 2. Item 17 and 18 are not required except for units provided with antenna terminals.
- 3. Item 17 complies with UL in the U.S.A.

KRX-793/593 (En) 5

## Antenna connections

### ■ AM loop antenna connection

The supplied antenna is for indoor use. Place it as far as possible from the radio unit. To get the best reception, remove the antenna from the radio unit.

### ■ FM indoor antenna connection

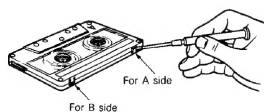
The supplied antenna is for indoor use. For stable reception, remove the antenna from the radio unit.

## Before operation

### Notes on cassette tape

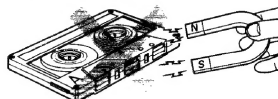
#### Safety tab (accidental erasure prevention tab)

After an important recording has been finished, break the safety tab, to prevent the recorded contents from being erased or recorded on accidentally.



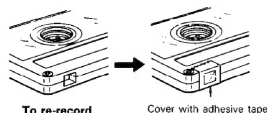
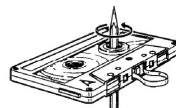
#### To store cassette tapes

Do not store the tapes in a place which is subject to direct sunlight, or near equipment that generates heat. Keep the cassette tapes away from any magnetic field.



#### When there is slack in the tape

In such a case, insert a pencil into the reel hole and wind the reel hub to remove the slack.



#### Notes:

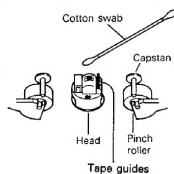
##### 1. 120-minute cassette tape

Since a 120-minute cassette tape is very thin, the tape could adhere to the pinch roller or be easily cut. It is recommended that these tapes not be used with this unit to prevent possible damage.

##### 2. Endless tapes

Do not use an endless tape, as this could damage the mechanism of the unit.

### Cleaning the head section



#### Cleaning the heads and peripheral components

For maintaining the best condition of the deck and for longer service life, always keep the head (recording/playback/erase), capstan and pinch roller clean. To clean them, perform the following:

1. Open the cassette holder.
2. Using a cotton swab dipped in alcohol, clean the head (recording/playback/erase), capstan and pinch roller carefully.

#### Demagnetizing the head

When the recording/playback head is magnetized, the sound quality will be deteriorated. In such a case, demagnetize the head using a commercially available demagnetizer (head eraser).

#### Note:

There are precisely aligned parts around the heads, including the tape guides. When cleaning, pay special attention so as not to apply shock to them.

### Beware of condensation

When water vapor comes into contact with the surface of cold material, water drops are produced.

If condensation occurs, correct operation may not be possible, or the unit may not function correctly.

This is not a malfunction, however, and the unit should be dried. (To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

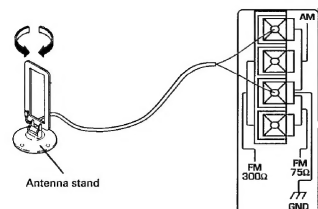
Be especially careful in the following conditions:

- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.

## Antenna connections

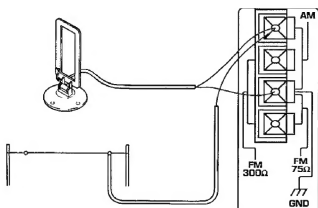
### ■ AM loop antenna connection

The supplied antenna is for indoor use. Place it as far as possible from the main system, TV set, speaker cords and power cord, and set it to a direction which provides the best reception.



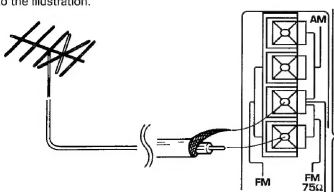
### ■ AM outdoor antenna connection

If the reception is poor when the AM loop antenna is used, distribute a vinyl-coated wire of more than 6 meters outdoors, without disconnecting the loop antenna.



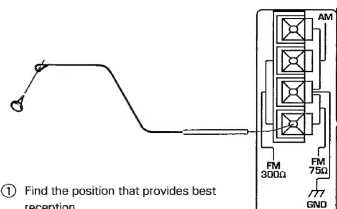
### ■ FM outdoor antenna connection

It is recommended to install an exclusive FM outdoor antenna to capture FM broadcasts with high sound quality. Use a coaxial cable for the connection between the outdoor antenna and FM ANTENNA terminal on the rear panel. For the connection between the coaxial cable and FM ANTENNA terminal, please refer to the illustration.



### ■ FM indoor antenna connection

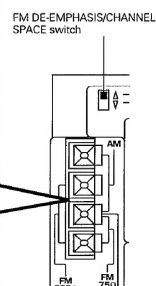
The supplied antenna is for indoor use. For stable reception, remove the indoor antenna after installing an outdoor antenna as soon as possible.



- ① Find the position that provides best reception.
- ② Fix the end with thumbtack or drawing pin.

#### Connection method to each antenna terminal

- ① Push lever.
- ② Insert cord.
- ③ Return lever.



### ■ FM DE-EMPHASIS/CHANNEL SPACE switch (Except for some areas)

The FM DE-EMPHASIS/CHANNEL SPACE switch on the rear panel is set to the correct setting that prevails in the area to which the unit is shipped. However, if the FM DE-EMPHASIS/CHANNEL SPACE setting is not matched to the area where the unit is to be used; for instance, when you move from area 1 to area 2 or vice versa, desired reception of AM/FM broadcasts is not expected. In this case, change the FM DE-EMPHASIS/CHANNEL SPACE setting in accordance with the area corresponding to the table. The FM DE-EMPHASIS is switched over at the same time.

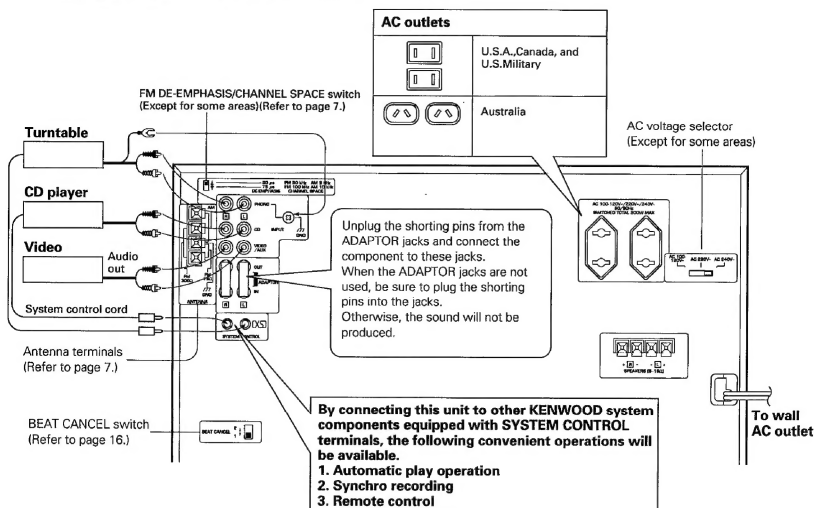
Area	CHANNEL SPACE freq.	FM DE-EMPHASIS
1. U.S.A., Canada, and South American countries	FM : 100 kHz AM : 10 kHz	75 $\mu$ s
2. Other countries	FM : 50 kHz AM : 9 kHz	50 $\mu$ s

- When changing the setting of the FM DE-EMPHASIS/CHANNEL SPACE switch, first disconnect the power cord, then reset the channel space switch, connect the power cord again, and turn the power on.

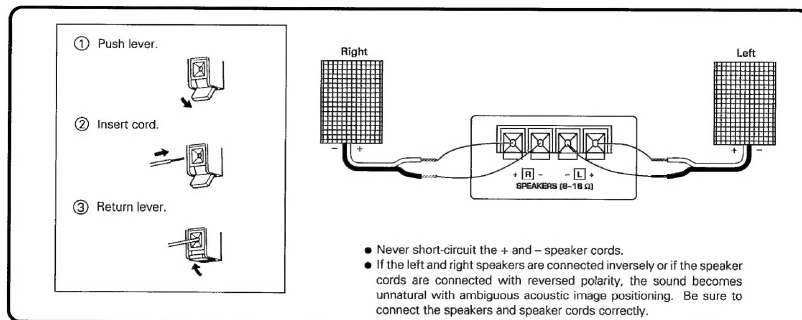
## System connections

Make connection as shown below. When connecting the related system components, refer also to the instruction manuals of the related components.

Do not plug in the power lead until all connections are completed.



### ■ Connection of speakers



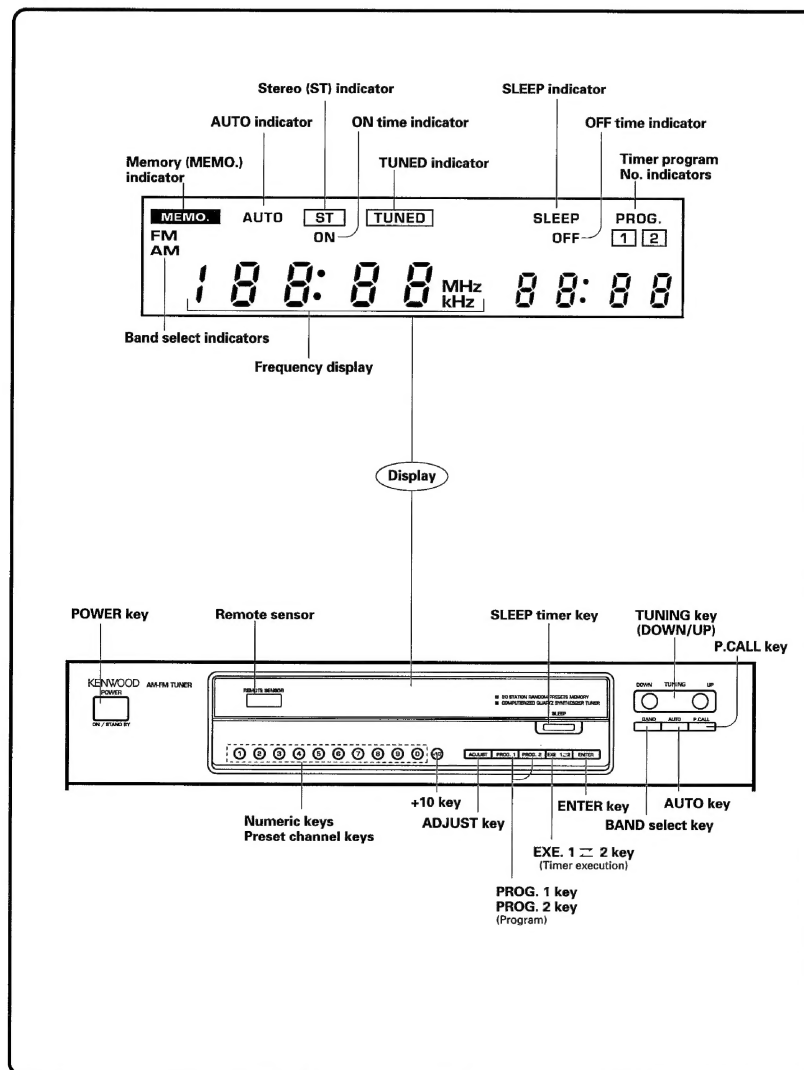
#### Notes:

1. Connect all cords firmly. If connections are loose, there could be loss of sound or noise produced.
2. When plugging and unplugging connection cords be sure to first remove the power cord from the AC outlet. Plugging/unplugging connection cords without removal of the power cord can cause malfunctions or damage to the unit.
3. Do not connect up a power source which is larger than that indicated on the socket at the rear of the unit.

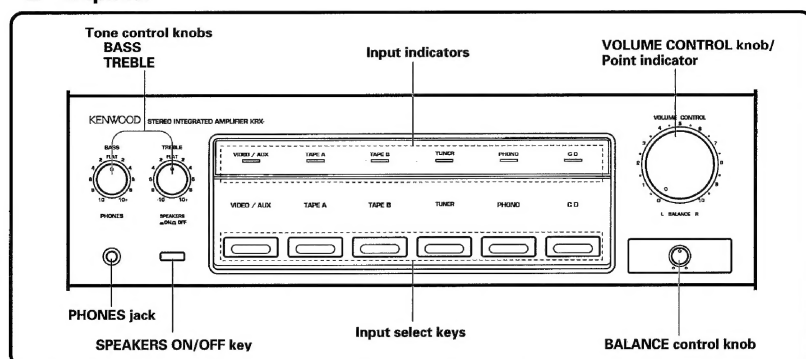


## Controls and indicators

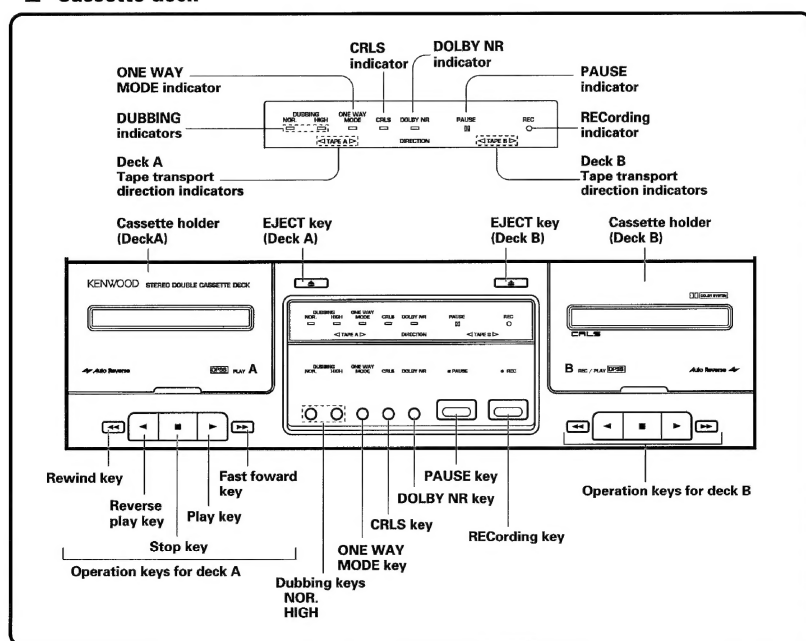
### ■ Tuner




## ■ Amplifier

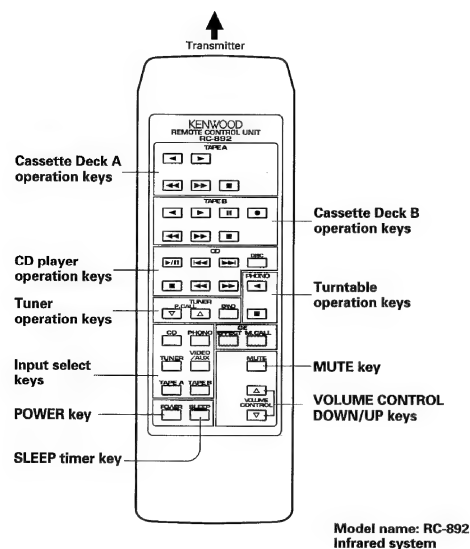


## ■ Cassette deck

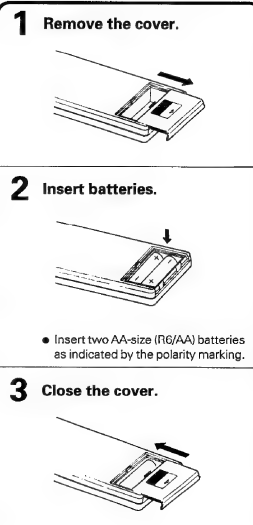


## Operation of remote control unit

Consult the instruction manuals for CD player (DP-492-DP-R793) or turntable (KD-491F) on how to use CD or turntable keys. Other keys have the same function as those on the main system. Keys indicated as  are not used with this unit.



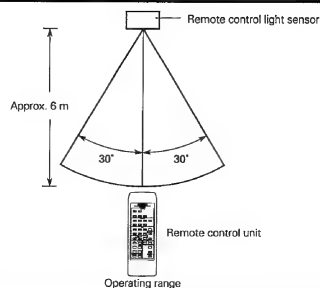
### ■ Loading batteries



### ■ Operation procedure

Plug the power cord of the system into an AC wall outlet, and press the **[POWER]** key on the remote control unit to turn the power on. When the power is turned on, press the key of the source component to be operated.

- When two operation keys on the remote control unit are pressed successively, press each key securely reserving an interval of more than 1 second for each press.
- Components connected via the system control cords, such as the CD player, can also be remote-controlled. In this case, please read the instruction manual supplied with your CD player.

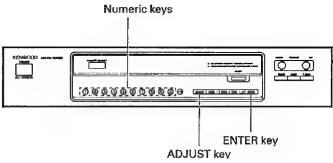


#### Notes:

1. The supplied batteries are intended for use in operation checks. Therefore, their lives may be shorter than ordinary batteries.
2. When the remote-controllable distance gets shorter than before, replace both batteries with new ones.
3. Malfunction may occur if direct sunlight or the light of a high-frequency lighting fluorescent lamp enters the remote control light sensor. In such a case, change the system installation position to prevent the malfunction.

# Clock adjustment

The tuner incorporates a clock. By adjusting the time of the clock, the time can be used not only for the clock display but also in the timer function.



**1** Insert the power plug into an AC power outlet.

• The clock display blinks.

**2** Enter the clock adjustment mode.



The leftmost character on the clock display blinks.

**3** Set the time.

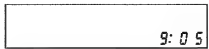
To input 9:05 AM: press 0, 9, 0, 5.



To input 4:50 PM: press 1, 6, 5, 0.



**4** Press the ENTER key.



The clock will start to work.

• Correct time can be set by pressing the key at the same time as a broadcast time announcement.

## STAND BY mode of POWER key

When the power cord of this system is plugged into an AC power outlet, the clock display of the tuner lights up regardless of the ON/OFF setting of the **POWER** key.

This indicates that a small amount of current is being supplied to the unit to back up the memory contents and support the timer function. This mode is referred to as the Stand By mode. While the clock display is lit, the power of the system can be switched ON/OFF from the remote control unit.

**Note:**  
The time display blinks after a power failure or when the power cord was unplugged from the power outlet. In this case, set the time again.

## Controls and indicators

### ■ Amplifier

Tone control knobs  
BASS

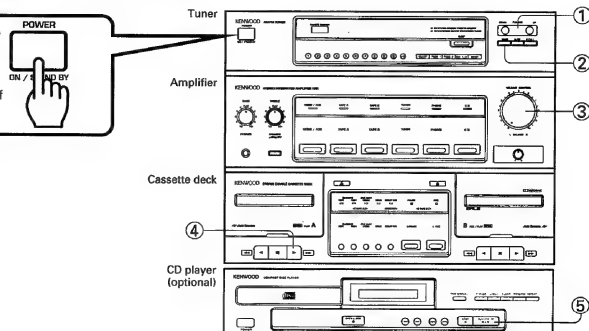
VOLUME CONTROL knob/

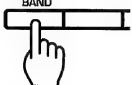
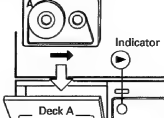
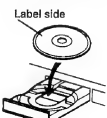
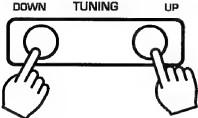
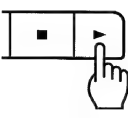

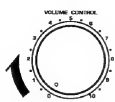
## Listening to sound

For details, also refer to the instruction manuals provided with the connected components.

Press the **POWER** key of the tuner.

- The **POWER** key on the tuner can switch on/off the powers of main system.



	To listen to a radio broadcast	To listen to a tape	To listen to a CD
<b>1</b>	<b>Select the tuner input.</b> <b>Select a broadcasting band by pressing the BAND key ②.</b> 	<b>Insert a tape in Deck A.</b> 	<b>Place a CD on the tray.</b> 
<b>2</b>	<b>Select a station.</b> <b>Press the TUNING UP or DOWN key ①.</b> 	<b>Play the tape.</b> <b>Press the play key ④.</b> 	<b>Play the CD.</b> <b>Press the play key ⑤.</b> 
<b>3</b>	<b>Adjust the volume.</b>  <ul style="list-style-type: none"> <li>Turn the <b>VOLUME CONTROL</b> ③ for an optimum volume.</li> <li>If sound is not output, check the connections described from page 8 again.</li> </ul>		

### Input selector keys of amplifier

When the power is switched on, the input select keys of the amplifier are initialized as follows.

**Priority order 1 Cassette deck** ..... If a tape is present in a cassette deck, it is played back automatically. If tapes are present in both decks, playback starts with Deck A.

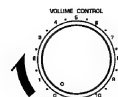
**Priority order 2 CD player** ..... If tapes are not present in cassette decks while a CD is present in the CD player, the CD is played.

If no tape or CD is present in the cassette decks and CD player, the input source which was selected before the power was turned off (TUNER, PHONO, AUX) is selected.

## Audio adjustment

### ■ Adjusting the volume

#### 1 Turn the VOLUME CONTROL knob.



Main unit



Remote control unit

- When adjusting the volume with the remote control unit, the VOLUME CONTROL knob on the main unit rotates while you press the key on the remote control unit.

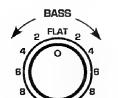
#### 2 Adjusting the left and right volume balance



To decrease right speaker volume

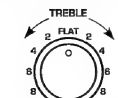
To decrease left speaker volume

### ■ Adjusting the tone



To decrease

To increase



To decrease

To increase

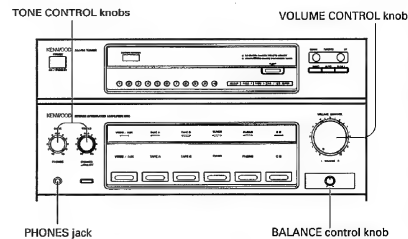
### ■ To mute the sound temporarily

Press the MUTE key.



Remote control only

- Pressing the key again resumes the previous volume.



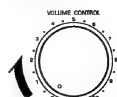
### ■ Listening through headphones

#### 1 Insert the headphone plug into the headphones jack.



- Set the amplifier's SPEAKERS switch to OFF.

#### 2 Adjust the volume.



#### SPEAKERS switch operation



Each press switches the speakers ON or OFF. Normally leave the speakers switched ON. In this position sound is output from the connected speakers. During private listening using headphones, switch the speakers OFF.

#### Automatic play operation function associated with input selector keys of amplifier

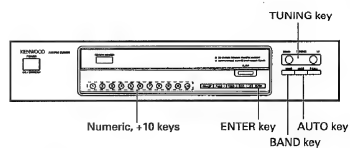
The automatic play operation allows to start playing the selected input source by simply pressing the input selector key (TAPE A, TAPE B, TUNER, CD or PHONO). It also allows to select a correct input selector key on the amplifier by simply starting playback on the desired input source component.

The same operation is also possible with the input selector keys on the remote control unit.

The input source selected at the moment the power is switched ON is the last source (TUNER, CD, etc.) selected before switching the power OFF.

## Operation of tuner

### ■ Receiving broadcast stations and storing them in memory (preset operation)



#### 1 Select the TUNER source.



#### 2 Select the broadcast band (FM, AM).



The bands are switched as follows every time the **BAND** key is pressed.

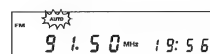
FM ↔ AM

- The frequency is displayed for a few seconds when a key associated with tuning is pressed.

#### 3 Select the tuning mode.



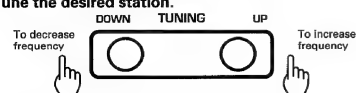
AUTO indicator lights up.



Press the key to select the auto (AUTO lighted) or manual (not lighted) mode.

- Normally, select the auto mode (with AUTO lighted).

#### 4 Tune the desired station.



- The TUNED indicator lights up when a station is received.
- Use manual tuning mode when the radio wave is weak and noisy. At this time, the stereo FM broadcast is received in monaural mode.

Auto tuning mode	Manual tuning mode
Press once. (Tuning stops automatically when a station is received.)	Press repeatedly, or press and hold, until the desired station is received.

#### 5 Store the station in preset memory.

##### ① Press the **ENTER** key.



MEMO indicator lights up.



- Proceed the step ② while the **MEMO** indicator is lighted.

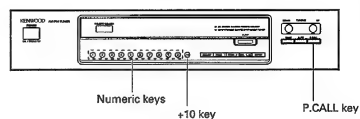
##### ② Press the desired numeric key.

##### Examples

To select preset No. 15: **1-10 5**  
To select preset No. 20: **1-10 1-10 0**



- When a station has previously been preset under the numeric key pressed, the newly preset station replaces the previous station.
- When preset is to be continued, repeat steps 2 to 5.
- A total of 20 stations can be preset in memory regardless of their broadcast bands.



## ■ Receiving a preset station

Select the desired station.

Press the numeric key.

Ex.) To select preset No. 3 :   
To select preset No. 10:

① ② ③ ④ ⑤



- The frequency of the station received will be displayed.

## ■ Listening to all preset stations in sequence (PRESET CALL)

Press the P.CALL key.

P.CALL

Main unit



P.CALL TUNER

Remote control unit

- With the key on the tuner main unit, preset stations are received in order of 1 → 2... 19 → 20 → 1... every time the key is pressed.
- With the key on the remote control unit, preset stations are received in order of 1 → 2... 19 → 20 → 1... every time the (UP) key is pressed, or in order of 20 → 19... 2 → 1 → 20... every time the (DOWN) key is pressed.

## Last channel memory

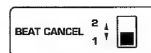
When the tuner's band selector is switched or when the amplifier's input selector is switched from another source to TUNER, the last received station is recalled for each of FM, AM when the **POWER** key on the tuner is switched ON.

## BEAT CANCEL switch

A high-pitched beat sound is sometimes heard when making recordings from AM broadcasts. When this occurs, the beat sound can be canceled by setting this switch to "1" or "2".

Beat sound may also appear when listening to AM broadcasts during tape dubbing; this beat sound can also be canceled by setting the BEAT CANCEL switch to "1" or "2".

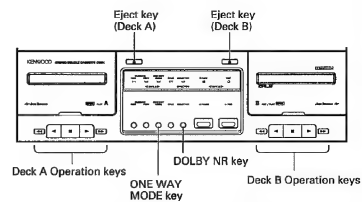
Move switch lever with a small screwdriver or other pointed tool.



Rear panel



## Playback of cassette deck

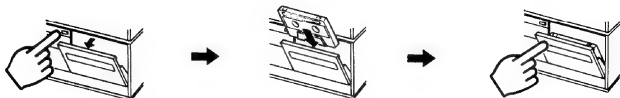


### ■ To play back a tape

#### 1 Insert a cassette tape.

Press the **EJECT** key.

Close securely  
by pressing upper inside.



- The type of tape, Normal, Chrome or Metal, is detected and set automatically.
- Be sure to remove tape slack before insertion.

#### 2 Determine the playback conditions.

##### ① Select the playback mode.



**ON** (lights up)  
(lights up)

**OFF** (goes off)  
(goes off)

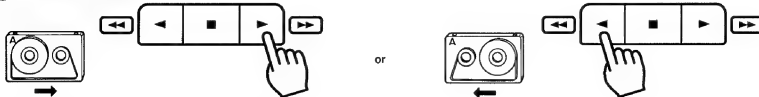
##### ② Select the Dolby NR mode.



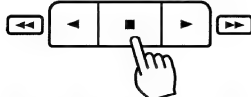
**ON** (lights up)  
(lights up)

**OFF** (goes off)  
(goes off)

#### 3 Start playback.



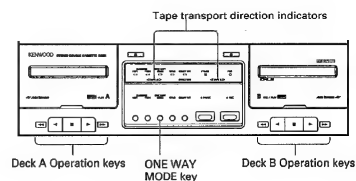
To stop playback, press the **ONE WAY MODE** key.



- When the **ONE WAY MODE** key is set to ON, the playback stops automatically at the end of tape.
- Do not press the **EJECT** key until the tape has stopped completely.

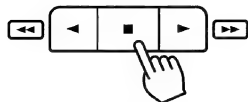
#### Dolby NR (Noise Reduction)

The Dolby NR system minimizes tape noise heard during tape playback by utilizing the characteristics of tape recording and playback. The tapes recorded with Dolby NR ON must be played back with Dolby NR ON.

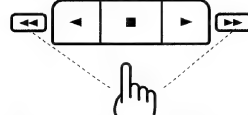


## ■ To wind the tape at high speed

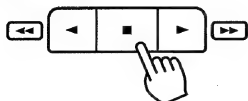
### 1 Stop playback.



### 2 Press the ◀◀ key or ▶▶ key.



### To stop fast tape winding



### Tape transport direction indicators

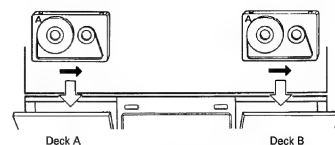
The ◀ ▶ indicators show the direction of tape transport in its playback or recording. The direction selected when the tape was stopped the last time is maintained even after the power is turned off. When the tape is started automatically by the automatic play operation, etc., the transport starts with the direction shown by the direction indicator. If you want to change the transport direction for the next time the power is turned on, press the play key of the opposite direction before turning power off.



## ■ Relay playback

This function plays back the tapes in both decks A and B continuously and repeatedly.

### 1 Insert tapes.



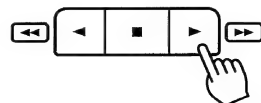
- Tapes are played in the directions indicated by their respective indicators.

### 2 Press the ONE WAY MODE key to ON.



- Relay playback cannot be initiated if this mode is OFF.

### 3 Start playback.

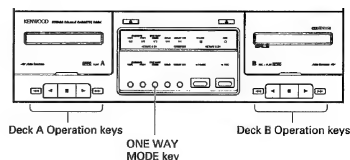
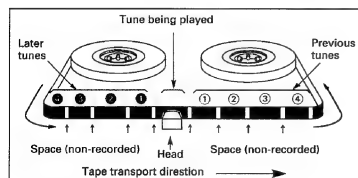


- The playback starts with the deck the play key of which is pressed.

## DPSS operation

The DPSS (Direct Program Search System) enables the following convenient operations according to the instructions of the operation keys (these operation are, however, not available on both decks simultaneously). The DPSS functions are based on the detection of non-recorded spaces of 4 seconds or more between tunes.

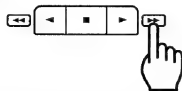
1. **Skip play:** By specifying a tune located several tunes beyond (or behind) the tune being played, skips tunes between the current tune, and the selected tune, and starts playback from the beginning of the selected tune. Up to 16 tunes can be skipped in Skip Search.
2. **Single-tune repeated playback:** One single tune is played back repeatedly up to 16 times.
3. **Rewind & Play:** Rewinds the tape to the beginning and starts playback from there.
4. **Dash & Play:** If a non-recorded space of more than 10 seconds is detected during playback, that space will be skipped by fast tape winding.



### ■ Skip play operation

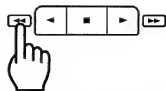
The example below shows the case in which the direction indicated by the tape transport direction indicator is ►. If the direction indicated by the tape direction indicator is ◄, always press the keys for the opposite directions to those shown in the illustrations below.

To play a tune located immediately after the tune being played



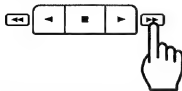
Press once during the playback.

To play the tune being played from the beginning



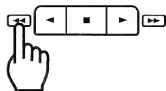
Press once during the playback.

To play a tune located 4 tunes beyond



Press 4 times during the playback.

To play tune located 4 tunes behind



Press 5 times during the playback.

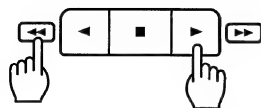
**The DPSS will not function properly with the following types of tapes.**

- Tapes containing spaces of 4 seconds or more, such as conversations and speeches.
- Tapes containing extremely low levels or non-recorded spaces in the middle of tunes, such as classical music.
- Tapes containing recording or large noise between tunes.
- Tapes containing spaces of less than 4 seconds between tunes.
- Tapes recorded with low recording level.
- Tapes recorded using Cross-fade recording.

## ■ Rewind & Play operation

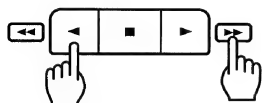
This operation is not available from the remote control unit.

Direction of tape direction indicator: ►



Press simultaneously.

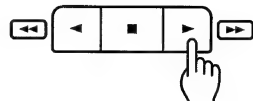
Direction of tape direction indicator: ◄



Press simultaneously.

## ■ Single-tune repeated playback operation

### 1 Play the tune to be repeated.



### 2 Press the play key of the same direction as the current tape transport direction.

When direction of tape direction indicator is ►:



- Normal playback resumes after repeating the same tune for 16 times.

## ■ Dash & Play operation

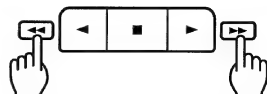
The Dash & Play skips long non-recorded spaces automatically as the tape is played. This operation is not available from the remote control unit.

### 1 Determine the playback mode (conditions).

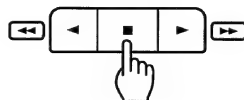


<b>ON</b> (lights up)	One side is repeated 8 times, after which playback stops.
<b>OFF</b> (goes off)	Two sides are repeated 8 times, after which playback stops.

### 2 Press the ◄◄ and ►► keys simultaneously.



To cancel the playback above in the middle

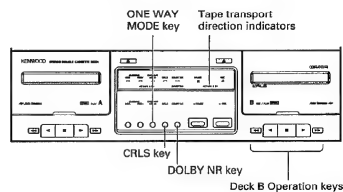


- Playback is stopped.

## Recording on cassette deck (Deck B only)

If the Kenwood Surround Processor SS-992 or SS-592 is connected to this unit, be sure to perform the following operations when recording.

- Set the surround mode to BYPASS mode.
- Set the SS-992's volume control to the center (15) position and do not move it from that position.
- Set the SS-592's MASTER LEVEL control to -10dB and do not move it from that position.

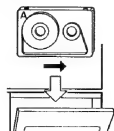


### ■ Preparation for recording

#### 1 Set up the cassette deck.

##### ① Insert a tape in deck B.

- Since this unit is not designed for use with metal tapes, recording on metal tapes cannot be carried out.



Deck B

##### ② Set the tape transport direction.

- Refer to page 18.



##### ③ Select one-side or two-side recording.

ONE WAY MODE



ON (lights up)	One-side recording
OFF (goes off)	Two-side recording

##### ④ Select the Dolby NR mode.

DOLBY NR



ON (lights up)	
OFF (goes off)	

#### 2 Select the source to be recorded.



These cannot be selected as the recording source.

#### 3 Adjust the recording level.

##### ① Play the musical source and output its sound.

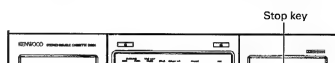
##### ② Press the CRLS key.

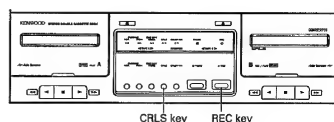


- Level adjustment completes in about 20 seconds. Wait until the indicator lights steadily.
- The deck enters the record-pause mode.
- If you press the Record key while the indicator is blinking, the recorded sound may distort.
- When the CRLS key is pressed while the indicator is blinking, the level adjustment is terminated at that moment and the deck enters the record-pause mode.
- The recording level setting is suspended if the sound of source is not input within about 5 second after the CRLS key has been pressed.

#### 4 Start recording.

Go to "Actual recording" according to the source to be recorded.





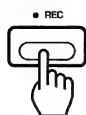
## ■ Actual recording

### When the source is TUNER

#### 1 Tune a station.

- Refer to page 15, 16.

#### 2 Press the Recording key.



### When the source is CD

#### Start recording.

Press the key of the CD player.

- Tape recording starts at the same time.

### When the source is PHONO

#### 1 Start playing the analog disc.

#### 2 Press the Recording key.

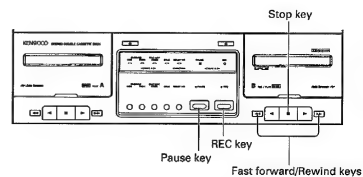


### CRLS

#### CRLS (Computer-controlled Recording Level System):

This function sets the optimum recording level automatically based on the sampling of the levels of a musical source for about 20 seconds.

- Even when you do not press the key ..... Recording is performed with the basic recording level. The basic recording level common for all input select keys has been set at the factory.
- The level is stored in memory once it has been set ..... The level determined by the key for each input source (TUNER, CD, PHONO, AUX) is stored in memory. From the next time, the same level is recalled for the same source and applied for recording even when the key is not pressed.
- To re-use the previous level after having pressed the key ..... Press the Stop key while the CRLS indicator is blinking to re-use the previously-set level.
- When the key is held depressed for more than 3 seconds ..... The indicator blinks at low speed then goes out. At this time, the CRLS level which has been stored for the input source being indicated returns to the basic recording level.



### ■ To pause recording temporarily

II PAUSE      • REC

• The II indicator lights up.

**To resume recording**

II PAUSE      • REC

### ■ To stop recording

**1**

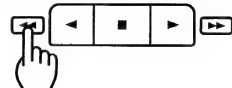
**2 Stop playing the source component.**

### ■ To re-start recording after mistake

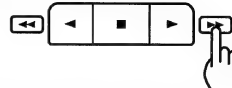
The following procedure is useful when you want to cancel recording in progress and restart it. A non-recorded space of about 4 seconds or more should be reserved before the position where recording was started.

#### 1 Stop recording and rewind tape.

During recording in the ► direction:



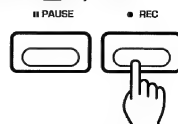
During recording in the ◀ direction:



- The recording is aborted, the tape is rewound to the beginning of the tune being recorded, and the deck enters the stop mode after leaving a non-recorded space of about 2 seconds from the end of the previous tune.

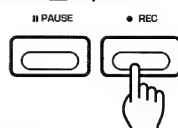
#### 2 Re-start recording.

① Press the [■] key twice.



- A non-recorded space of about 4 seconds is reserved on tape, then the tape transport stops.

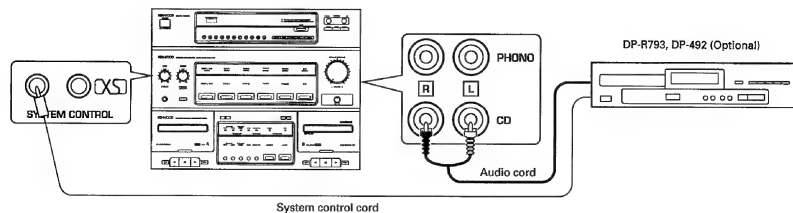
② Press the [■] key once.



- Recording starts.

## Recording on cassette deck (Deck B only)

By connecting this unit to other KENWOOD CD player equipped with SYSTEM CONTROL terminals, the following convenient operations will be available.

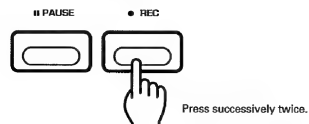


## ■ Synchro recording of CD playback

### 1 Make the preparations for recording.

Refer to page 21.

### 2 Enter the record-pause mode.



- The deck enters the record-pause mode after leaving a non-recorded space of about 4 seconds.

### 3 Start playing the CD.

- Tape recording starts at the same time.
- When the CD player has completed playback, the cassette deck also stops recording and enters the stop mode.

#### To pause

Press the [PAUSE] key of the CD player.

#### To resume recording

Press the [PAUSE] key of the CD player.

#### To stop recording

Press the [STOP] key of the CD player.

Note:  
When the [STOP] key on the cassette deck is pressed, the cassette deck enters the stop mode, but the playback of CD does not stop.

#### \* IMPORTANT

This option may not be available in some areas. For details on options, consult your dealer.

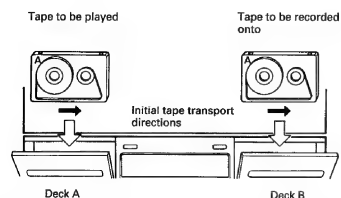


# Tape dubbing

The dubbing refers to the copy of the recorded contents of a tape to another tape (tape in Deck A → tape in Deck B).

Normal-speed dubbing: Copy at normal tape speed.  
High-speed dubbing: Copy at double the normal speed.

## 1 Insert tapes in the cassette decks.



## 2 Set the same tape transport direction for both tapes.

- Refer to page 18.

Deck A direction indicators

Deck B direction indicators



## 3 Select one-way or two-way dubbing mode.



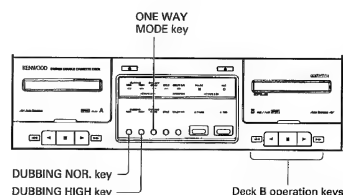
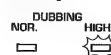
<b>ON</b>	For one-way dubbing
<b>OFF</b>	For two-way dubbing

## 4 Start dubbing.

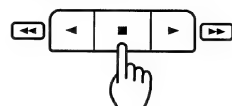
For normal-speed dubbing



For high-speed dubbing



### To stop dubbing Press the Stop key on deck B.



- Both Decks A and B enter the stop mode.

### To pause dubbing

Normal-speed dubbing: Press the **NOR.** key.

High-speed dubbing: Press the **HIGH** key.

- Only deck B enters the record-pause mode after leaving a non-recorded space of about 4 seconds in case of normal-speed dubbing, or about 6 seconds in case of high-speed dubbing.
- To skip tunes you do not want to dub on another tape during dubbing, press the **[REW]** key of Deck A.
- To resume dubbing after pause, press the same DUBBING key as above (**NOR.** or **HIGH**) again.

### Notes:

- The recording level cannot be adjusted for dubbing.
- The **DOLBY NR** key does not function during dubbing.
  - \* The tape recorded by dubbing features the same NR system as the original tape in Deck A.
- Noise from TV may interfere with dubbed sound if high-speed dubbing is executed near a TV set. To prevent this, install the system farther from the TV set.
- If the original tape was recorded at a high level, the sound quality may be degraded if high-speed dubbing is used. In such a case, use normal-speed dubbing.

# Timer operations

Be sure to adjust the present time before proceeding to the following.

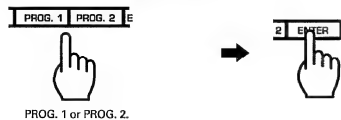
## ■ Timer reception of radio broadcast

### 1 Switch the power ON.



- Remove disc(s) from the CD player.
- Remove tape(s) from the cassette decks.

### 2 Select the program setting mode.



PROG. 1 or PROG. 2.

### 3 Input the ON time with the numeric keys.

6:30 AM: 0, 6, 3, 0



### 4 Input the OFF time with the numeric keys.

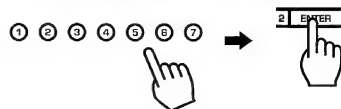
7:00 AM: 0, 7, 0, 0



### 5 Select the TUNER source.



### 6 Select the preset key under which the station to be received has been preset.

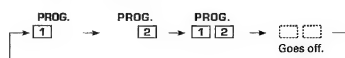


- The station must be preset previously.

### 7 Activate the execution of the program.

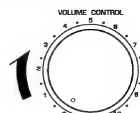


- Program 1 will be executed.
- Program 2 will be executed.
- Programs 1 and 2 will be executed.
- Timer programs will not be executed.

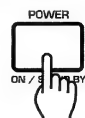


- The selected program No. indicator lights up.

### 8 Adjust the volume.



### 9 Switch the power OFF.



### To continue the reception of radio station which has been started to be received by timer ON:

Press the EXECUTE key before the OFF time comes so that the program number display is extinguished. This allows to receive radio broadcasting even after the OFF time.

#### Notes:

1. If you commit a mistake in the timer programming, re-start a new program from the beginning.
2. If it is required to modify a program which has already been set, set a new program from the beginning.
3. When a program has previously been set in the program No. selected in step 2, the newly-set program replaces the previous program.
4. Do not operate the EXECUTE key or POWER key while the time program execution has been activated; otherwise malfunction will occur.

Be sure to adjust the present time before proceeding to the following.

## ■ Timer playback of tape

### 1 Switch the power ON.



- Remove disc(s) from the CD player.

### 2 Select the program setting mode.



### 3 Input the ON time with the numeric keys.

6:30 AM: 0, 6, 3, 0



### 4 Input the OFF time with the numeric keys.

7:00 AM: 0, 7, 0, 0

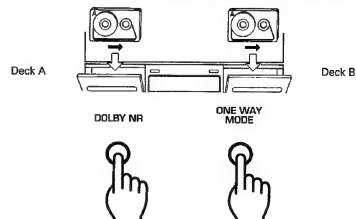


### 5 Press the ENTER key once.



### 6 Insert a tape and determine the playback condition.

Set the DOLBY NR and ONE WAY MODE keys as required, and check the tape transport direction(s).



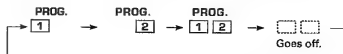
- Timer playback is possible with either Deck A or Deck B. However, if tapes are placed in decks, playback will begin from Deck A.

### 7 Activate the execution of the program.

Press the **EXE.1-2** key.



Program 1 will be executed. Program 2 will be executed. Programs 1 and 2 will be executed. Timer programs will not be executed.



- The selected program No. indicator lights up.

### 8 Adjust the volume.

### 9 Switch the power OFF.




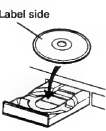


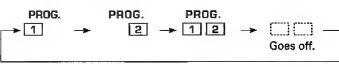

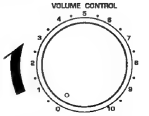



#### Notes:

- If you commit a mistake in the timer programming, re-start a new program from the beginning.
- If it is required to modify a program which has already been set, set a new program from the beginning.
- When a program has previously been set in the program No. selected in step 2, the newly-set program replaces the previous program.
- Do not operate the **EXE.1-2** key or **POWER** key while the time program execution has been activated; otherwise malfunction will occur.

Be sure to adjust the present time before proceeding to the following.

## ■ Timer playback of CD

Plug the CD player's power cord into the AC outlet on this unit's rear panel. When connected in this manner, always leave the CD player's POWER key ON and control the power to the CD player from this unit.

<p><b>1 Switch the power ON.</b></p>  <p>• Remove tape(s) from the cassette decks.</p>	<p><b>6 Place a disc in the CD player.</b></p> 
<p><b>2 Select the program setting mode.</b></p>  <p>PROG. 1 or PROG. 2.</p>	<p><b>7 Activate the execution of the program.</b></p>  <p>Program 1 will be executed. Program 2 will be executed. Programs 1 and 2 will be executed. Timer programs will not be executed.</p>  <p>• The selected program No. indicator lights up.</p>
<p><b>3 Input the ON time with the numeric keys.</b></p> <p>6:30 AM: 0, 6, 3, 0</p> 	<p><b>8 Adjust the volume.</b></p> 
<p><b>4 Input the OFF time with the numeric keys.</b></p> <p>7:00 AM: 0, 7, 0, 0</p> 	<p><b>9 Switch the power OFF.</b></p> 
<p><b>5 Press the ENTER key once.</b></p> 	

Notes:

1. If you commit a mistake in the timer programming, re-start a new program from the beginning.
2. If it is required to modify a program which has already been set, set a new program from the beginning.
3. When a program has previously been set in the program No. selected in step 2, the newly-set program replaces the previous program.
4. Do not operate the EXEC button or POWER key while the time program execution has been activated; otherwise malfunction will occur.

## Timer operations

Be sure to adjust the present time before proceeding to the following.

### ■ Timer reception of radio broadcast

- |                                      |   |
|--------------------------------------|---|
| <p><b>1 Switch the power ON.</b></p> | <p><b>6 Select the preset key under which the station to be received has been preset.</b></p> |
|--------------------------------------|---|

## ■ To check timer program contents

To check the contents of program 1

Press the **PROG. 1** key.



To check the contents of program 2

Press the **PROG. 2** key.



- When a program is selected, its contents will be displayed for about 5 seconds, and the previous display resumes after it.

## ■ To cancel timer program execution

Press the **EXE. 1-2** key.

Extinguish the program indicator(s) you do not want to execute.



- The program contents are not cleared even when its execution is canceled.

## Re-activation of timer execution after canceling it

Since the program itself is retained in memory, check its contents and perform the operation from the step "Activate the execution of the program" as follows.

- Select the program number to be executed by pressing the **EXE. 1-2** key.
- Adjust the volume and tone in case of timer reception of broadcast or timer playback of CD or tape.
- Switch the power OFF.

## ■ Operation of sleep timer

The sleep timer allows to turn the system power off after the specified period has elapsed. This function may be most convenient when you like to fall in sleep while listening to music.

The period can be set up to 90 minutes in 10-minute steps. The sleep timer is applied in priority over other timer programs.

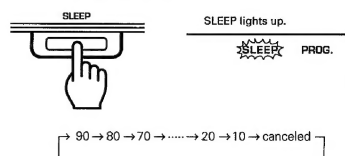
### 1 Switch the power ON.

Press the **POWER** key of the tuner.



### 2 Specify the period after which the power is to be switched OFF.

Press the **SLEEP** key.



- Each press decreases the period by 10 minutes.

## To cancel sleep timer:

Press the **SLEEP** key until the sleep timer is canceled.



Switch the power OFF.



### Notes:

- Be careful that the setting time of the two programs are not overlapped.
- Program contents cannot be erased. When not using the timer, press the **EXE. 1-2** key to extinguish both program indicators.

## Cassette decks

Symptom	Cause	Remedy
Sounds is not produced when the Play	<ul style="list-style-type: none"> <li>The head is dirty.</li> </ul>	<ul style="list-style-type: none"> <li>Clean the head referring to "Cleaning the</li> </ul>

## In case of difficulty

What appears to be a malfunction may not always be serious. If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

### Remote control unit

Symptom	Cause	Remedy
Remote control operation is not possible.	<ul style="list-style-type: none"><li>● Batteries are exhausted.</li><li>● The system control cords are not connected properly.</li><li>● The remote control unit is too far away from the main system, controlling angle is too large, or there is an obstacle in between.</li><li>● The source component to be operated does not contain the tape(s) or CD.</li><li>● An attempt is made to play a tape which is being recorded in the cassette deck.</li></ul>	<ul style="list-style-type: none"><li>● Replace with new batteries.</li><li>● Connect properly referring to "System connections".</li><li>● Operate the remote control unit within the controllable range.</li><li>● Place the tape(s) or CD in the source component to be played.</li><li>● Wait until the recording is completed.</li></ul>

### Amplifier and speakers

Symptom	Cause	Remedy
Sound is not output.	<ul style="list-style-type: none"><li>● The speaker cords are disconnected.</li><li>● The volume is set to the minimum position.</li><li>● The <b>[MUTE]</b> key of the remote control unit is set to ON.</li></ul>	<ul style="list-style-type: none"><li>● Connect them properly referring to "System connections".</li><li>● Adjust the volume to a proper level.</li><li>● Press the <b>[MUTE]</b> key to OFF.</li></ul>
Sound is not output from one of the speakers.	<ul style="list-style-type: none"><li>● The speaker cord is disconnected.</li><li>● The BALANCE control is set to an extreme position.</li></ul>	<ul style="list-style-type: none"><li>● Connect it properly referring to "System connections".</li><li>● Adjust the Left/Right balance.</li></ul>

### Tuner

Symptom	Cause	Remedy
The clock display is blinking without changing from a certain time.	<ul style="list-style-type: none"><li>● There was a power failure.</li><li>● The power cord was unplugged.</li></ul>	<ul style="list-style-type: none"><li>● Set the current time again.</li><li>● Set the current time again.</li></ul>
The timer does not work.	<ul style="list-style-type: none"><li>● The current time is not set, or there was a power failure.</li><li>● The timer ON time and OFF time have not been set.</li><li>● The timer execution has not been specified.</li></ul>	<ul style="list-style-type: none"><li>● Set the current time referring to "Time adjustment".</li><li>● Set the timer ON time and OFF time.</li><li>● Specify execution by pressing the <b>[EXEC 1-2]</b> key.</li></ul>
Radio stations cannot be received.	<ul style="list-style-type: none"><li>● No antenna is connected.</li><li>● The broadcast band is not set properly.</li><li>● The frequency of the desired station is not tuned.</li></ul>	<ul style="list-style-type: none"><li>● Connect an antenna.</li><li>● Set the broadcast band properly.</li><li>● Tune the frequency of the desired station.</li></ul>
A station which was preset cannot be received by pressing the corresponding numeric key.	<ul style="list-style-type: none"><li>● The preset station belongs to a frequency that cannot be received.</li><li>● The preset memory was cleared because the power cord had been unplugged for a long period of time.</li></ul>	<ul style="list-style-type: none"><li>● Preset a station with a receivable frequency.</li><li>● Preset the station again.</li></ul>
Interference.	<ul style="list-style-type: none"><li>● Noise due to ignition noise of an automobile.</li><li>● Noise due to an influence from an electric appliance.</li><li>● Noise due to a nearby TV set.</li></ul>	<ul style="list-style-type: none"><li>● Install the outdoor antenna apart from the road.</li><li>● Turn off the power of the appliance.</li><li>● Install the system more apart from the TV set.</li></ul>

# Cassette decks

Symptom	Cause	Remedy
Sounds is not produced when the Play key is pressed.	<ul style="list-style-type: none"> <li>The head is dirty.</li> <li>Tape is irregularly wound and hard to take up.</li> <li>A non-recorded tape is being played.</li> </ul>	<ul style="list-style-type: none"> <li>Clean the head referring to "Cleaning the head section".</li> <li>Replace the tape.</li> <li>Play a recorded tape.</li> </ul>
The deck does not work when an operation key is pressed.	<ul style="list-style-type: none"> <li>The cassette holder is not closed completely.</li> <li>The operation key was pressed immediately after closing the cassette holder.</li> <li>The operation key was pressed within less than 3 seconds after the power was turned on.</li> <li>Tape is not inserted.</li> <li>Tape is irregularly wound and hard to take up.</li> <li>Tape has been fully wound to reel.</li> </ul>	<ul style="list-style-type: none"> <li>Close the cassette holder completely.</li> <li>Press the desired operation key in a few seconds after closing the cassette holder.</li> <li>Press the desired operation key in more than 3 seconds after turning the power on.</li> <li>Insert a tape.</li> <li>Replace the tape.</li> <li>Change the tape transport direction or insert the tape inversely.</li> </ul>
DPSS malfunctions.	<ul style="list-style-type: none"> <li>The tape is not suitable for DPSS operation, for example the spaces between tunes are too short.</li> </ul>	<ul style="list-style-type: none"> <li>Read "DPSS operation".</li> </ul>
The dubbing on Deck A and Deck B ends at different timing.	<ul style="list-style-type: none"> <li>This is due to the difference in tape length or to the characteristics of the cassette deck mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>A small time difference is not regarded as a failure.</li> </ul>
The cassette holder does not open when the Eject key is pressed.	<ul style="list-style-type: none"> <li>The key is pressed during recording or playback.</li> </ul>	<ul style="list-style-type: none"> <li>Press in the Stop mode.</li> </ul>
Sound is hoarse, or high frequencies are not audible.	<ul style="list-style-type: none"> <li>The head is dirty.</li> <li>The tape is stretched or wrinkled.</li> </ul>	<ul style="list-style-type: none"> <li>Clean the head referring to "Cleaning the head section".</li> <li>Replace the tape.</li> </ul>
Sound is distorted.	<ul style="list-style-type: none"> <li>The recording level has not been set by the <b>CLS</b> key.</li> <li>A tape recorded with distorted sound is being played.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the recording level referring to "Recording operation on cassette deck".</li> <li>Replace the tape.</li> </ul>
Recording is not initiated when the recording key is pressed.	<ul style="list-style-type: none"> <li>The protection tab on the cassette has been broken.</li> <li>The cassette holder is not closed completely.</li> <li>The TAPE input selector is selected on the amplifier.</li> <li>Tape has been fully wound to a reel.</li> </ul>	<ul style="list-style-type: none"> <li>Use a cassette with unbroken tab, or close the hole.</li> <li>Close the cassette holder completely.</li> <li>Press the input select key of the source to be recorded.</li> <li>Change the tape transport direction of Deck B or insert the tape inversely.</li> </ul>
Noise level is high.	<ul style="list-style-type: none"> <li>The head is magnetized.</li> <li>External noise is induced.</li> <li>A tape recorded with Dolby NR ON is being played with Dolby NR OFF.</li> </ul>	<ul style="list-style-type: none"> <li>Demagnetize the head referring to "Cleaning the head section".</li> <li>Install the system apart from other electrical appliances and TV set.</li> <li>Press the <b>DOLBY NR</b> key to ON.</li> </ul>
Sound is vibrating.	<ul style="list-style-type: none"> <li>The capstans or pinch rollers are dirty.</li> <li>Tape is irregularly wound.</li> </ul>	<ul style="list-style-type: none"> <li>Clean the head referring to "Cleaning the head section".</li> <li>Wind the tape regularly by fast forwarding, rewinding or playing it fully from one reel to another.</li> </ul>

## Notes:

- With some tapes, a squeaky noise is produced when the tape is stopped automatically. This is due to the tape protection function, and not a malfunction.
- Do not use 120-minute tapes, for the tape is too thin and gets easily tangled.
- This system is microprocessor-controlled, so malfunction may occur due to external noise or interference noise. In such a case, unplug the power cord, plug it and turn power on again.
- Do not use contact cleaners because it could cause a malfunction. Be specially careful against contact cleaners containing oil, for they may deform the plastic components.

## Specifications

⚠ Caution: Read this page carefully to ensure safe operation.

### Amplifier section

Rated power output for the KRX-793  
(For the U.S.A. and Canada)

100 watts per channel minimum RMS, both channels driven, at 8  $\Omega$  from 40 Hz to 20,000 Hz with no more than 0.9% total harmonic distortion. (FTC)

(For other countries)

(IHF '68) From 40 Hz to 20,000 Hz,  
0.9 % T.H.D. at 8  $\Omega$  ..... 80 W + 80 W  
1 KHz, 0.9 % T.H.D. at 8  $\Omega$  ..... 90 W + 90 W

Rated power output for the KRX-593

50 watts per channel minimum RMS, both channels driven, at 8  $\Omega$  from 40 Hz to 20,000 Hz with no more than 0.9% total harmonic distortion. (FTC)

Total harmonic distortion  
at 1/2 rated power ..... 0.05 %

Signal to noise ratio

PHONO (MM) ..... 70 dB  
CD, VIDEO ..... 100 dB

Input sensitivity/Impedance

PHONO (MM) ..... 2.5 mV/47 k $\Omega$   
CD, VIDEO ..... 200 mV/33 k $\Omega$

### Tuner section

#### FM tuner section

Tuning frequency range ..... 87.5 MHz ~ 108 MHz  
Usable sensitivity

(IHF at 75  $\Omega$ ) ..... 0.95  $\mu$ V/10.8 dBf

Total harmonic distortion (at 1 kHz, 65 dBf input)

MONO ..... 0.4 %

Signal to noise ratio (at 1 kHz, 65 dBf input)

MONO ..... 78 dB

STEREO ..... 68 dB

Stereo separation (at 1 kHz) ..... 40 dB

Frequency response

(30 Hz to 15 kHz) ..... +1.0 dB, -2.0 dB

#### AM tuner section

Tuning frequency range

9 kHz step ..... 531 kHz ~ 1,602 kHz

10 kHz step ..... 530 kHz ~ 1,610 kHz

For U.S.A. and Canada model

..... 530 kHz ~ 1,700 kHz

Usable sensitivity ..... 14  $\mu$ V/(500  $\mu$ V/m)

### Cassette deck section

Type ..... 4 track 2 channel stereo

Heads

Playback/Record head (Deck B) ..... 1

Playback head (Deck A) ..... 1

Erasing head (Deck B) ..... 1

Motors ..... 1 (each deck)

Fast winding time

(Deck A) ..... Approx. 110 seconds with C-60 tape

Frequency response (Deck B)

Normal tape ..... 30 Hz to 16,000 Hz,  $\pm$ 3 dB

CrO<sub>2</sub> tape ..... 30 Hz to 17,000 Hz,  $\pm$ 3 dB

Signal to noise ratio

DOLBY NR ON ..... 62 dB (Normal tape)

DOLBY NR OFF ..... 55 dB (Normal tape)

Wow and flutter ..... 0.08 % (W.R.M.S.)

### General

Power consumption for the KRX-793

For the U.S.A. and Canada ..... 200 W

For other countries ..... 200 W (IEC)

Power consumption for the KRX-593

For the U.S.A. and Canada ..... 130 W

For other countries ..... 130 W (IEC)

### AC outlets

For U.S.A. and Canada

SWITCHED ..... 2 (200 W, 1.6 A max)

For other countries

SWITCHED ..... 2 (200 W max.)

Dimension ..... W: 440 mm (17-5/16")

H: 343 mm (13-1/2" )

D: 290 mm (11-7/16")

Weight (net) ..... 12.0 kg (26.4 lb)

Note:

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

For the U.S.A.

### FCC WARNING:

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.